

We claim:

1. An apparatus for automated testing, calibration and characterization of test adapters for semiconductor devices, comprising:

a holder for holding a test adapter;

at least one probe head adjustably disposed relative to said holder, said probe head having at least two contact pins with an adjustable spacing distance therebetween; and

an adjustment device configured to adjust said probe head relative to said holder.

2. The apparatus according to claim 1, wherein said at least one probe head is one of a plurality of probe heads.

3. The apparatus according to claim 1, wherein said probe head is movably disposed in elevation perpendicularly to a surface of said holder.

4. The apparatus according to claim 1, wherein said adjustment device is a robot arm and said probe head is mounted on said robot arm.

5. The apparatus according to claim 1, which comprises a control device connected to control a position of said probe head and a rotation of said holder.
6. The apparatus according to claim 1, wherein said holder is configured to hold test adapters with different diameters.
*or one
first*
7. The apparatus according to claim 1, which comprises a stepping motor disposed to selectively move said holder.
8. The apparatus according to claim 1, which comprises a control device connected for controlling a distance between said contact pins.
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9. The apparatus according to claim 7, which comprises a control device connected to said stepping motor and wherein said stepping motor is controlled by said control device.
10. The apparatus according to claim 1, wherein the test adapter is a test card.

11. The apparatus according to claim 1, wherein the test adapter is formed with a number of contact surfaces one behind the other in a radial direction of the test adapter, and said probe head has a number of said contact pins corresponding to the number of contact surfaces on the test adapter.

Spec's

12. The apparatus according to claim 1, wherein said contact pins are formed with pointed ends.

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13. The apparatus according to claim 1, wherein said contact pins are formed with flat ends, configured to enable contact to be made with contact needles on the test adapter.

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14. The apparatus according to claim 1, wherein said contact pins are spring-biased contact pins.

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15. The apparatus according to claim 14, wherein said contact pins have a profile defining the spring-biased configuration thereof..

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16. The apparatus according to claim 14, wherein said contact pins have a separate spring.

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17. The apparatus according to claim 1, wherein said holder is configured to be rotatable or movable with respect to said adjustment device.

Spec's

18. The apparatus according to claim 1, wherein said probe head is adjustable within a coordinate system selected from the group consisting of a polar coordinate system and a cartesian coordinate system.

19. The apparatus according to claim 1, which comprises an interface board and contact pins configured to contact contact surfaces on the test adapter.

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